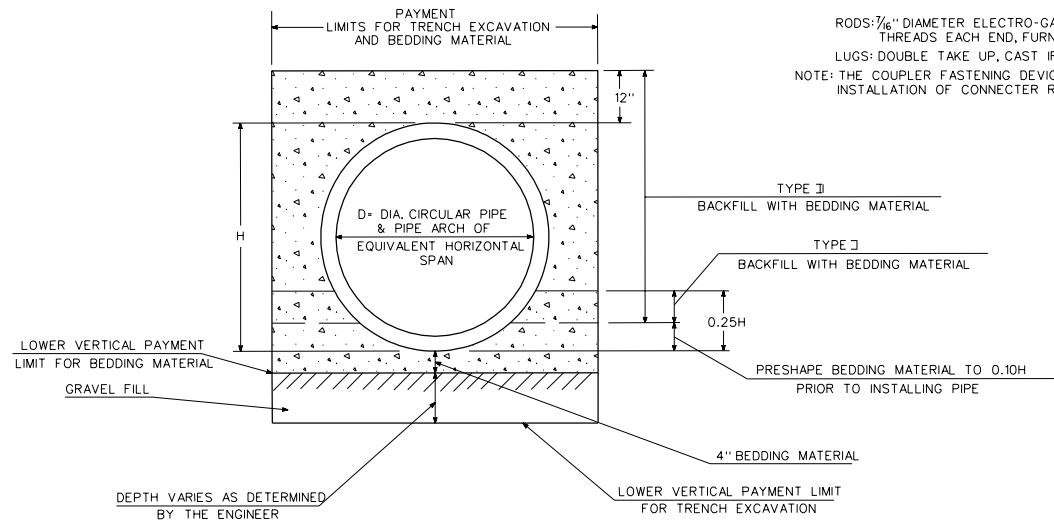
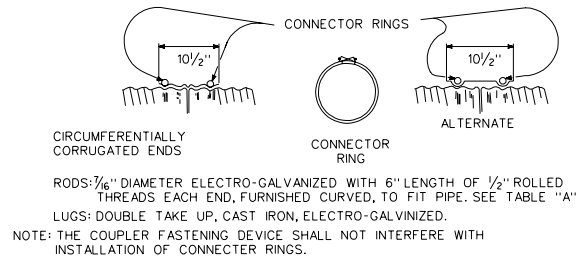


INSTALLATION  
WHERE GRAVEL FILL NOT USED



INSTALLATION  
WHERE GRAVEL FILL IS USED  
BEDDING FOR CULVERTS

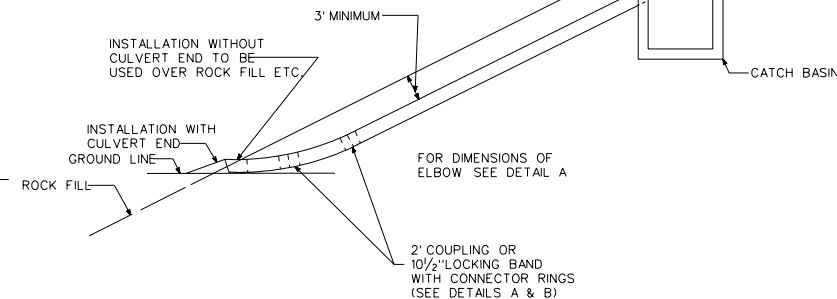


TYPICAL C.C.M. PIPE INSTALLATIONS IN ROCK SLOPE

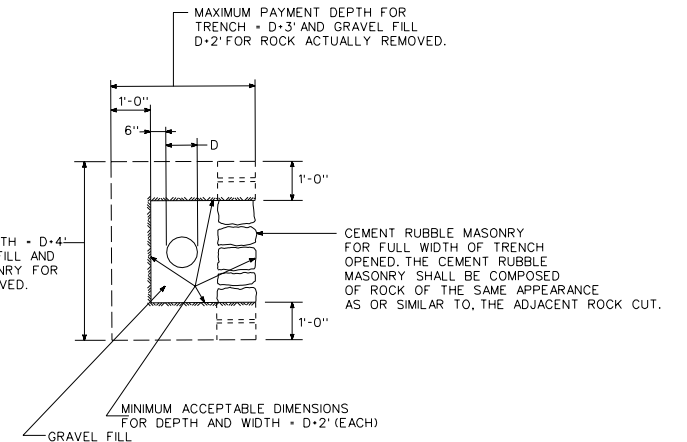
TABLE "A"  
CONNECTOR RINGS

PIPE DIAMETER	LENGTH OF RING
12"	52"
15"	61"
18"	71"
21"	80"
24"	90"
30"	108"
36"	128"
42"	147"
48"	166"

DETAIL "B"

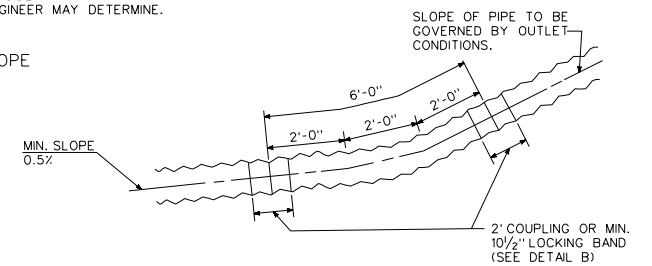


TYPICAL APPLICATIONS OF C.C.M.P. ELBOW ON HIGH FILL



SECTION A-A

ROCK REMOVED BEYOND THE MAXIMUM PAYMENT LIMITS SHOWN ABOVE SHALL BE REPLACED WITH CEMENT RUBBLE MASONRY AND GRAVEL. FILL AS REQUIRED TO CLOSE THE OPENING AS SHOWN ON THE PLANS AT THE CONTRACTORS EXPENSE; HOWEVER, THE PAYMENT LINES MAY BE MODIFIED TO COINCIDE WITH NATURAL FAULTS OR FISSURES OF THE ROCK AS THE ENGINEER MAY DETERMINE.

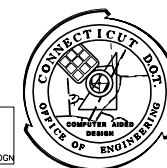


C.C.M.P. ELBOW AND COUPLING

DETAIL A

TYPICAL CCM PIPE INSTALLATIONS IN EARTH  
AND ROCK SLOPES AND BEDDING FOR CULVERTS

MANUAL REVISIONS TO THIS  
DOCUMENT ARE PROHIBITED.  
ALL REVISIONS MUST BE  
PERFORMED ON  
Cadd File: 05A2-C200,2003651A.DGN



SPECIAL STUDIES  
GLENN L. ARZT 10/15/88  
TOM McMAHON 11/23/88  
JOSEPH OBARA 5/13/91  
D.L. COFFEY 5/15/91  
8/26/91